ARG44458
anti-PDF antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PDF
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PDF
Species	Human
Immunogen	Human PDF recombinant protein
Conjugation	Un-conjugated
Alternate Names	PDF; Peptide Deformylase, Mitochondrial; Polypeptide Deformylase; Peptide Deformylase (Mitochondrial); Peptide Deformylase-Like Protein; EC 3.5.1.88; PDF1A

Application Instructions

Application table

Application	Dilution
FACS	1-3 µg/1x10^6
IHC-P	2-5 µg/ml
WB	0.25-0.5 µg/ml

Application Note: The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

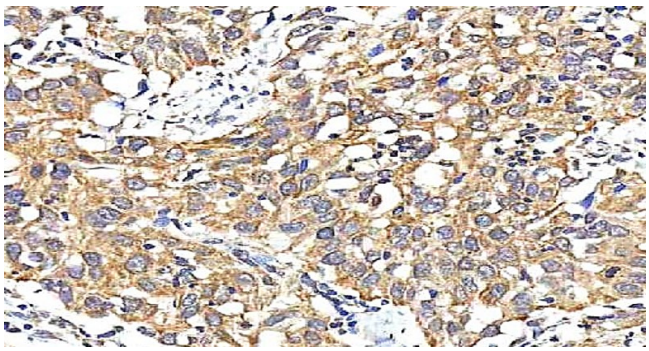
Form	Liquid
Purification	Affinity purified with Immunogen.
Buffer	0.9% NaCl, 0.2% Na2HPO4, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

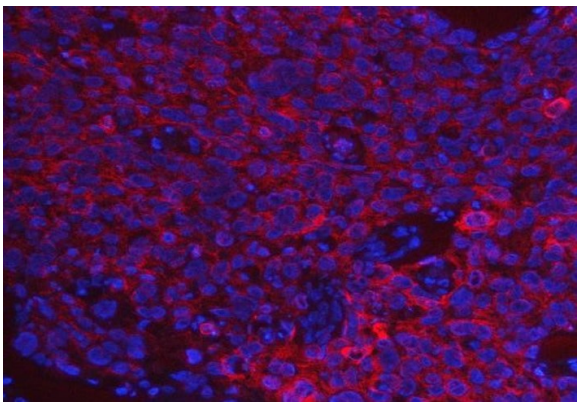
Gene Symbol	PDF
Gene Full Name	Peptide Deformylase, Mitochondrial
Background	Protein synthesis proceeds after formylation of methionine by methionyl-tRNA formyl transferase (FMT) and transfer of the charged initiator f-met tRNA to the ribosome. In eubacteria and eukaryotic organelles the product of this gene, peptide deformylase (PDF), removes the formyl group from the initiating methionine of nascent peptides. In eubacteria, deformylation of nascent peptides is required for subsequent cleavage of initiating methionines by methionine aminopeptidase. The discovery that a natural inhibitor of PDF, actinonin, acts as an antimicrobial agent in some bacteria has spurred intensive research into the design of bacterial-specific PDF inhibitors. In human cells, only mitochondrial proteins have N-formylation of initiating methionines. Protein inhibitors of PDF or siRNAs of PDF block the growth of cancer cell lines but have no effect on normal cell growth. In humans, PDF function may therefore be restricted to rapidly growing cells.
Function	Removes the formyl group from the N-terminal Met of newly synthesized proteins.
Calculated Mw	27 kDa
Cellular Localization	Mitochondrion

Images



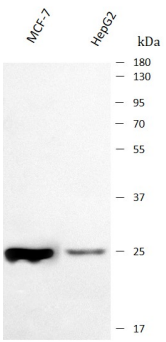
ARG44458 anti-PDF antibody IHC-P image

Immunohistochemistry: Human urothelial carcinoma stained with ARG44458 anti-PDF antibody at 2 µg/mL dilution.



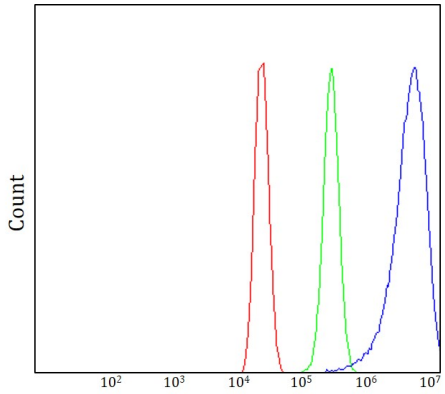
ARG44458 anti-PDF antibody IHC-P image

Immunohistochemistry: Human esophageal squamous cell carcinoma stained with ARG44458 anti-PDF antibody at 2 µg/mL dilution.



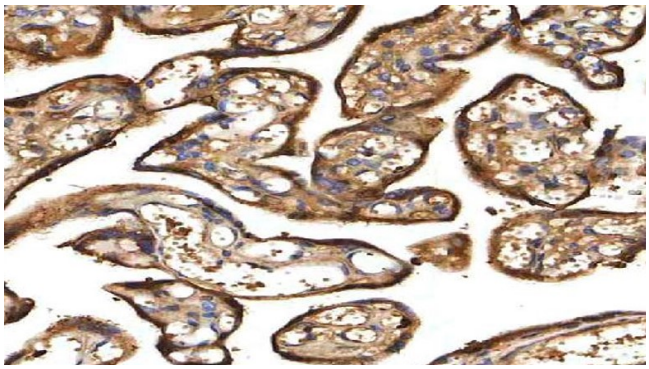
ARG44458 anti-PDF antibody WB image

Western blot: MCF-7 and HepG2 stained with ARG44458 anti-PDF antibody at 0.5 µg/mL dilution.



ARG44458 anti-PDF antibody FACS image

Flow Cytometry: MCF-7 stained with ARG44458 anti-PDF antibody at 1 µg/10^6 cells dilution.



ARG44458 anti-PDF antibody IHC-P image

Immunohistochemistry: Human placenta stained with ARG44458 anti-PDF antibody at 2 µg/mL dilution.